

**Government and Public Administration Cluster
Naval Science III: Naval Knowledge
Course Number 28.02500**

Course Description:

The purpose of this course is to further the foundation in citizenship and leadership established in Naval Science One and Two and to expound upon the virtues of the United States citizenship with knowledge of uses of the world’s waterways through the viewpoint of National power and International law. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training Instruction, NAVEDTRA 37128. The performance standards in this course are based on the performance standards identified in the curriculum for the United States Navy Junior Reserve Officer Training Corps. Successful completion of three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

Course Standard 1

GPA-NSIINK-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé

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Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	

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Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

Sea Power and National Security

Course Standard 2

GPA-NSIIINK-2

Students will demonstrate an understanding of how sea power strongly impacts our nation's political, economic, and military well-being.

- 2.1 Define the importance of sea power as it relates to America.
- 2.2 Describe four major developments since World War II that have increased the importance of the oceans of the world.
- 2.3 Describe the strategic ocean areas.
- 2.4 Describe the mobility of sea power.
- 2.5 Describe the purpose and function of the United States Merchant Marine and the relationship between maritime commerce and the economy of the United States.
- 2.6 Explain the importance of oceanography to the United States.
- 2.7 Describe the vital role oceans will play in the future of humankind.

The U.S. Merchant Marine

Course Standard 3

GPA-NSIIINK-3

Students will investigate the role of the merchant marine in National Defense.

- 3.1 Give a historical view of the United States Merchant Marine from 1850 to the present.
- 3.2 Describe national policy as it relates to the Merchant Marine Acts.
- 3.3 Describe the impact of waterborne commerce.
- 3.4 Describe the types of merchant ships.
- 3.5 Describe the auxiliary function of the U.S. Merchant Marine in National Defense.
- 3.6 Explain the role of the Merchant Marine in supporting our military forces in both peace and war.
- 3.7 Describe the role of the Merchant Marine in carrying strategic materials and energy resources which support the civilian economy and the defense production of our nation.
- 3.8 Explain the direct support the Merchant Marine provides to some military operations.
- 3.9 Identify the auxiliary combatant role of Merchant ships.
- 3.10 Describe the role of the Merchant Marine in support of foreign policy.
- 3.11 Describe the future of the Merchant Marine.

Grand Strategy and Preparedness

Course Standard 4

GPA-NSIIINK-4

Students will investigate the role of sea power and national security.

- 4.1 Define national, grand, and military strategy.
- 4.2 Name the major strategists from 400 B.C. to the mid-nineteenth century.
- 4.3 Describe the three classic schools of strategy.
- 4.4 Explain preparedness as it relates to grand strategy.
- 4.5 Describe the three phases of the evolution of U.S. grand strategy.
- 4.6 Describe the concepts of massive retaliation and flexible response as they relate to U.S. grand strategy.
- 4.7 Describe the three principle elements of today's national military strategy.
- 4.8 Explain the anticipated future strategic trends.

Course Standard 5

GPA-NSIIINK-5

Students will investigate United States strategy and the Navy.

- 5.1 Describe the two basic functions of the U.S. Navy.
- 5.2 Explain the three functional roles of the Navy within national military strategy.
- 5.3 Differentiate between tactics and strategy.
- 5.4 Describe modern tactical innovations.
- 5.5 Describe the capabilities the U.S. naval force must have if it is to be able to support national strategy.
- 5.6 Describe the Navy's fundamental and supportive tactical warfare tasks.
- 5.7 Describe the two categories of major tactical naval ships.

Course Standard 6

GPA-NSIIINK-6

Students will investigate national security and modern conflict.

- 6.1 Explain the major concerns and elements used to evaluate national security.
- 6.2 Describe the nine principles of war that govern war fighting strategy and tactics.
- 6.3 Explain the following forms of modern armed conflict: general war, limited war, revolution war and terrorism.
- 6.4 List the possible causes of general war.
- 6.5 Describe the prerequisites for revolution.

Naval Operations, Communications, and Intelligence

Course Standard 7

GPA-NSIINK-7

Students will expand their understanding and knowledge of naval operations and support functions.

- 7.1 Describe naval task force organization 2.
- 7.2 Describe the naval command and control organization.
- 7.3 Define strike and strike group in the context of naval striking forces.
- 7.4 Describe the missions of the carrier strike forces.
- 7.5 Describe the modern carrier strike group (CSG).
- 7.6 Describe the naval surface action groups.

Course Standard 8

GPA-NSIINK-8

Students will demonstrate their understanding and knowledge of major organizations of the Navy and how naval communications among naval units is accomplished.

- 8.1 Describe the major functions of naval communications.
- 8.2 Describe the major telecommunications commands under the Chief of Naval Operations.
- 8.3 Cite ways in which electronic equipment has aided in communication.
- 8.4 Explain the purpose of International Morse Code.
- 8.5 Describe the advantages of visual communication.
- 8.6 Describe the various sound and pyrotechnic signaling devices.

Course Standard 9

GPA-NSIINK-9

Students will demonstrate knowledge of intelligence community; the intelligence cycle types of intelligence and the value of good intelligence to include the need to protect that intelligence.

- 9.1 Provide a definition of intelligence.
- 9.2 Evaluate Describe the steps of the intelligence cycle and types of intelligence used.
- 9.3 Describe the make-up of the U.S. intelligence community to include the various agencies that makeup national, military, and naval intelligence.
- 9.4 Describe the role of the Office of Naval Intelligence (ONI).
- 9.5 Describe the basis of foreign intelligence organizations.
- 9.6 Describe the roles of spies and diplomats in espionage operations.
- 9.7 Define counterintelligence.
- 9.8 List the three different security classifications.
- 9.9 Explain the purposes of security clearances.
- 9.10 Explain the consequences of security breaches.

Navy Logistics, Research and Development

Course Standard 10

GPA-NSIINK-10

Students will demonstrate knowledge of Naval Logistics to include the functional areas of the Navy's Supply System.

- 10.1 Describe the Navy's logistics supply and service system that began in World War I.
- 10.2 Describe the principles of logistics that come into play in logistics planning at all levels.
- 10.3 Describe the six functional areas of logistics.
- 10.4 Explain the following four elements of logistics: acquisition, distribution, sustainment, and disposition.
- 10.5 Describe logistics in modern warfare to include the Maritime Prepositioning Force.

Course Standard 11

GPA-NSIINK-11

Students will expand their understanding and knowledge of naval research and development.

- 11.1 Describe the Research and Development (R&D) program of the Department of Defense (DoD).
- 11.2 Describe the management of the Navy's R&D programs.
- 11.3 Explain the role of the Office of Naval Research (ONR) in naval research and development.
- 11.4 Describe the role of the Naval Research Laboratory (NRL) in naval research and development.
- 11.5 Describe the objectives of the naval oceanographic research program.
- 11.6 Describe the current advanced research and development project areas.

Military Justice and International Law

Course Standard 12

GPA-NSIINK-12

Students will demonstrate an understanding of military justice and how it relates to the Navy.

- 12.1 Explain the history of law codes as it pertains to the Navy.
- 12.2 Describe the relationship between the U.S. Constitution and Military Law.
- 12.3 Define Navy Regulations.
- 12.4 Describe important Navy Regulations.
- 12.5 Explain the purpose of the Uniform Code of Military Justice (UCMJ).
- 12.6 Cite the composition of the UCMJ articles.

Course Standard 13

GPA-NSIINK-13

Students will have broad basis knowledge of discipline and punishment.

- 13.1 Describe the procedures for applying discipline and punishment in the Navy.
- 13.2 Describe the procedures for initiating and preferring charges on enlisted personnel aboard a U.S. Navy ship or shore station.
- 13.3 List the process of apprehension, arrest, restriction, and confinement used in the Navy.
- 13.4 Describe the procedure for preliminary inquire leading to captain's mast.
- 13.5 Cite two basic classes of official naval disciplinary actions.
- 13.6 Describe the features of nonjudicial punishment.
- 13.7 Cite the three types of military courts-martial.
- 13.8 Describe the relationship between civil jurisdiction and military justice.
- 13.9 Cite the methods used for disciplinary separations from the service.

Course Standard 14

GPA-NSIINK-14

Students will demonstrate an understanding of international law as it applies to countries using the sea.

- 14.1 Explain Identify the United States' role in international relations.
- 14.2 Explain the purpose of international law and diplomacy.
- 14.3 Describe the history of diplomacy as it relates to international law and the sea.
- 14.4 Describe the sources of international law which bind independent nations.
- 14.5 Identify three specific characteristics sovereign nations have in common.
- 14.6 Identify the rights and duties of sovereign states under international law.
- 14.7 Describe the process of diplomatic recognition.
- 14.8 Describe the guidelines pertinent to military and naval attachés under international law.
- 14.9 Describe how international problems are solved through the effective use of international law.
- 14.10 Explain the concept of collective security.
- 14.11 Describe the United Nations (UN).
- 14.12 Describe international, regional and collective arrangements recognized by the UN.
- 14.13 Describe modern collective security trends and the issues that revolve around such trends.

Course Standard 15

GPA-NSIINK-15

Students will have a working knowledge of the fundamentals of international law.

- 15.1 Identify and explain the customs and treaties from 1604 to the present which relate to the international law of the sea.
- 15.2 Identify the main ideas that have formed customary international law of the sea.
- 15.3 Describe the four possible adverse impacts of international legal rules affecting the deployment and navigation of naval vessels.
- 15.4 Explain the increase of sovereign territorial sea jurisdiction.
- 15.5 Describe the potential hardships for the U.S. Navy in straits and many scattered islands around the world.
- 15.6 Explain the controversy over where internal bays and gulfs end and territorial seas begin.
- 15.7 Describe how international law deals with rivers, lakes and canals.
- 15.8 Explain the law of the high seas.
- 15.9 Describe the economic zone problems.
- 15.10 Describe policies on territorial self-defense and rights concerning fisheries.
- 15.11 Explain the international law on the continental shelf and sea beds of the world.

Course Standard 16

GPA-NSIINK-16

Students will have a working knowledge of the fundamentals of the law of war at sea.

- 15.1 Describe the international law as it relates to war ships.
- 15.2 Explain the general rules of war on land and at sea.
- 15.3 Describe war at sea and the effects war has on international law.
- 15.4 Describe the methods used to enforce laws of war.

Course Standard 17

GPA-NSIINK-17

Students will demonstrate an understanding of the evolution and basic elements of naval weapons.

- 17.1 Describe the evolution of naval weapons from 1453 to present.
- 17.2 Discuss basic weapons terminology as it applies to the Navy.
- 17.3 Describe the Navy weapons organization.
- 17.4 Discuss the range of weapons used by the Navy.
- 17.5 Describe the major considerations used to select ship's weapons system.
- 17.6 Describe weapon systems elements and requirements.
- 17.7 Describe the shipboard weapon control systems used by the Navy.
- 17.8 Describe aircraft weapon control systems.

Course Standard 18

GPA-NSIINK-18

Students will demonstrate an understanding of naval guns and projectiles.

- 18.1 Describe the major characteristics and nomenclature of Naval guns.
- 18.2 Describe the principal components of gun ammunition.
- 18.3 Describe the principles of gun projectiles.
- 18.4 Describe the techniques used by the Navy to provide gunfire support.

Course Standard 19

GPA-NSIINK-19

Students will demonstrate an understanding of navy ship, submarine and aircraft missiles.

- 19.1 Describe the four basic component parts of guided missiles.
- 19.2 Describe the five main types of missile guidance systems.
- 19.3 Describe the uses of guided missiles.
- 19.4 Describe the types and usage of guided missiles used in the Navy.

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- 19.5 Describe the Navy's submarine-launched ballistic missile program.
- 19.6 Describe the purpose of the Navy's cruise missiles launched from surface ships, submarines and aircraft.
- 19.7 Describe the Navy's Ballistic Cruise Missiles.
- 19.8 Describe the Navy's surface-to-surface missile types.
- 19.9 Describe the second line of fleet defense with the use of Navy's surface to air missiles.
- 19.10 Describe the purpose of the Navy's air-to-surface missiles.
- 19.11 Describe the purpose of the Navy's air-to-air missiles.

Course Standard 20

GPA-NSIINK-20

Students will demonstrate an basic understanding of naval laser weapons and rail guns.

- 20.1 Describe the Navy's use of LASER weapons.
- 20.2 Describe the Navy's use of the Rail Gun.

Course Standard 21

GPA-NSIINK-21

Students will demonstrate an basic understanding of naval cyber warfare.

- 21.1 Describe Command relationships in the Naval Cyber warfare organization.
- 21.2 Discuss the fundamentals of Cyber warfare and Cyber security.
- 21.3 Describe Cyber-attacks and methods.
- 21.4 Discuss Cyber defense and methods.

Course Standard 22

GPA-NSIINK-22

Students will demonstrate a basic understanding of Mine Warfare.

- 22.1 Describe the principles used in mine warfare from the American Revolution to the present.
- 22.2 Describe the classification of mines.
- 22.3 Describe the three major types of mine countermeasures, to include ship treatment against magnetic and acoustic mines, minesweeping, and mine hunting.
- 22.4 Describe Mine Hunting and what it involves.
- 22.5 Describe the major capabilities of mine warfare.

Course Standard 23

GPA-NSIINK-23

Students will expand their understanding and knowledge of Chemical, Biological and Nuclear Warfare.

- 23.1 Differentiate conventional weapons from Chemical, Biological and Nuclear weapons.
- 23.2 Describe some examples of the use of chemical and biological warfare in earlier times.
- 23.3 Explain what has tended to keep the use of chemical and biological warfare in earlier times.
- 23.4 Explain chemical warfare and describe the common types of chemical warfare agents found in the weapons stockpiles of most major nations today.
- 23.5 Explain biological warfare.
- 23.6 Explain nuclear warfare and describe the possible effects of a nuclear warhead explosion.
- 23.7 Explain the physiological effects of radiation exposure on personnel.

Course Standard 24

GPA-NSIINK-24

Student will demonstration an understanding of the Navy's mission and organization to ensure combat effectiveness.

- 24.1 Describe the administrative organization of a typical navy fighting ship, to include the responsibilities of key personnel.

Course Standard 25

GPA-NSIINK-25

Students will expand their understanding and knowledge of the responsibilities of Navy watchstanders.

- 25.1 Describe the duties and responsibilities of watchstanders.
- 25.2 Describe the duties performed by crewmembers during underway watches.
- 25.3 Describe the differences between shipboard and shore-based watches.